

Title (en)
METAL TAB FOR CHIP ASSEMBLY

Title (de)
METALLLASCHE FÜR DIE CHIPANORDNUNG

Title (fr)
LANGUETTE MÉTALLIQUE POUR ARRANGEMENT DE PUCE

Publication
EP 3872848 A1 20210901 (EN)

Application
EP 20159815 A 20200227

Priority
EP 20159815 A 20200227

Abstract (en)
Aspects of the present disclosure include devices for reducing defects associated with differences in a coefficient of thermal expansion associated with a semiconductor die and a metal tab connected to the semiconductor die. The metal tab can include at least one slot on at least one side of the metal tab, wherein the at least one slot i) creates an opening between at least two portions of the metal tab and ii) exposes the semiconductor die in relation to the metal tab. The semiconductor die can be a silicon (Si) die and the metal tab can be a copper (Cu) tab, where the at least one slot includes at least four slots corresponding to each of at least four sides of the metal, and wherein with respect to each of the at least four sides, each corresponding slot i) creates an opening between at least two portions of the Cu metal tab and ii) exposes the Si semiconductor die in relation to the Cu metal tab.

IPC 8 full level
H01L 23/00 (2006.01); **H01L 23/495** (2006.01)

CPC (source: CN EP US)
H01L 23/15 (2013.01 - US); **H01L 23/3735** (2013.01 - EP); **H01L 23/4922** (2013.01 - CN); **H01L 23/49517** (2013.01 - EP); **H01L 23/49541** (2013.01 - US); **H01L 23/49562** (2013.01 - EP); **H01L 23/49568** (2013.01 - US); **H01L 23/49582** (2013.01 - US); **H01L 24/37** (2013.01 - EP); **H01L 24/48** (2013.01 - EP); **H01L 25/072** (2013.01 - CN); **H01L 24/06** (2013.01 - EP); **H01L 24/40** (2013.01 - EP); **H01L 24/49** (2013.01 - EP); **H01L 2224/0603** (2013.01 - EP); **H01L 2224/32225** (2013.01 - EP); **H01L 2224/37147** (2013.01 - EP); **H01L 2224/40** (2013.01 - EP); **H01L 2224/40227** (2013.01 - EP); **H01L 2224/48247** (2013.01 - EP); **H01L 2224/48491** (2013.01 - EP); **H01L 2224/49111** (2013.01 - EP); **H01L 2224/73221** (2013.01 - EP); **H01L 2924/00014** (2013.01 - EP); **H01L 2924/10253** (2013.01 - EP); **H01L 2924/181** (2013.01 - EP)

Citation (search report)
• [XYI] US 6147410 A 20001114 - ELLIOTT ALEXANDER J [US], et al
• [XYI] JP H02281737 A 19901119 - TOSHIBA CORP
• [XYI] US 2015357303 A1 20151210 - KOHL NICO [DE], et al

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
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EP 3872848 A1 20210901; CN 113314495 A 20210827; US 11798868 B2 20231024; US 2021272884 A1 20210902

DOCDB simple family (application)
EP 20159815 A 20200227; CN 202110226138 A 20210301; US 202117182582 A 20210223